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THE FARM CRISIS OF THE 1980s: A LOOK BACK FOR OHIO AND THE U.S.

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## THE FARM CRISIS OF THE 1980s: A LOOK BACK FOR OHIO AND THE U.S.

During the early and mid-1980s, the farm financial crisis ranked high on the nation's agenda. However, as the crisis has receded from national attention, what is its legacy? This question is examined by comparing the 1982 and recently released 1987 Censuses of Agriculture. These two censuses bracket the farm crisis, with the 1982 census taken just before the crisis burst on the national agenda and the 1987 census taken as the crisis was disappearing from the national agenda. In addition, a historical perspective is used to examine the major adjustment mechanisms to farm financial stress: reducing farm numbers, off-farm employment by farm operator households, and asset, primarily land, revaluation.

### A Comparison of Selected Characteristics - 1982 and 1987

Both Ohio and U.S. farm numbers declined from 1982 to 1987 (Table 1). The compound annual rate of decline was 1.4% for the U.S. and 1.8% for Ohio. Land in farms also declined, but the decline was proportionally smaller than for farm numbers. Consequently, average acres per farm increased from 177 to 189 acres in Ohio and from 440 to 462 acres in the U.S. Average sales per farm, measured in current dollars, also increased by about \$4,000 per Ohio farm and \$6,000 per U.S. farm. Thus, the historical trend of fewer farms with a larger average size continued through the 1987 census.

Value of land and buildings per farm declined substantially between 1982 and 1987. Average current dollar value per Ohio farm decreased from \$267,899 to \$227,341, a 15% decline. Average current dollar value per U.S. farm declined by 16%, from \$345,869 to \$289,387.

Between 1982 and 1987, the proportions of Ohio and U.S. farms earning more than \$100,000 and the proportions earning less than \$20,000 increased (Table 1). Although the changes were small, they were consistent with an emerging bimodal farm distribution.

Turning to farm operator characteristics, average age increased from 49.8 to 51.1 years for Ohio farm operators, and from 50.5 to 52 years for U.S. operators. Otherwise, minimal changes occurred in the distribution of farmers by residence, number of days worked off farm, farm tenure, and farm organization.

#### Historical Look at Selected Characteristics of U.S. and Ohio Farms

Four characteristics are examined in greater historical detail. They are number of farms, average age of farm operators, proportion of operators working off farm, and value of land and buildings per farm. These characteristics are selected because they reflect important adjustment mechanisms to financial stress; i.e., farmers can exit farming, farmers can work off-farm, or farm assets can be revalued downward.

#### Farm Exodus

The exit of farmers has historically been an important adjustment mechanism for bringing agriculture into equilibrium with the rest of the economy. For both Ohio and the U.S., the period between 1982 and 1987 was marked by an increased exodus of farmers compared with the 1974-1982 period (Figure 1). On the other hand, annual rate of decline in farm numbers between 1982 and 1987 was substantially smaller than from 1945 to 1974. Thus, in

light of most of the post-World War II experience, the exit of farmers during the financial crisis of the 1980s was relatively small.

The financial crisis was often associated with a concern about the entry of young farmers. In other words, farm operators were growing older as a generation of young farmers was discouraged from becoming farmers. The average age of U.S. and Ohio farmers increased from 1982 to 1987. Moreover, average age of U.S. farm operators is higher now than any time since the 1940 Census of Agriculture, when average age was first calculated (Figure 2). In 1940, average age of U.S. farmers was 48. By 1987, average age was 52 years.

A somewhat different picture emerges when change in average operator age is compared with change in median age of the U.S. population. Between 1940 and 1987, median age of the U.S. population increased from 29 to 32.1 years. Thus, average age of Ohio farmers, which was 51 years in both 1940 and 1987, actually declined relative to the U.S. population median age. Average age of U.S. farmers increased relative to the median age, but only by one year. Furthermore, median age of the U.S. population increased 1.5 years between 1982 and 1987, which equaled or exceeded the increase in average U.S. and Ohio farm operator age. In conclusion, the age of Ohio and U.S. farmers has changed little relative to the U.S. population since 1940.

#### Off-Farm Income

Another option farm operator households can use to adjust to farm financial stress is to work off farm. Percent of U.S. and Ohio farm operators working off farm more than 200 days (i.e., full-time off-farm employment) increased slightly between 1982 and 1987. This picture of moderate change is confirmed when the 1982-1987 changes are compared with historical trends.

From 1940 until the late 1960s, proportion of farmers working both anytime and full-time off farm increased significantly (Figure 3). Since then, the proportion working anytime off farm has remained at 50-55% for the U.S. and 55-60% for Ohio. While proportion of U.S. farm operators working full-time off farm was a record 35.3% in the 1987 Census of Agriculture, this was only 0.7 percentage points higher than in 1982. Furthermore, percentage of Ohio farmers working more than 200 days off farm has remained constant at approximately 40% since the late 1960s.

Another indicator of moderate-to-no change in dependence on off-farm income during the farm crisis is provided by examining the ratio of off-farm income to total cash income (off-farm income plus net cash farm income) for U.S. farm family households. This ratio increased from approximately 40% in the early 1960s to just over 50% by 1980. However, the ratio was unchanged as the 1980s came to an end.

#### Value of Farm Assets

As noted, average nominal value of land and buildings per farm declined substantially for both Ohio and the U.S. between 1982 and 1987. This decline in nominal value per farm was the first since the 1935 census (Figure 4). (Only U.S. values are presented because the data are similar for Ohio.) Real value per farm (1982 \$) declined not only from the 1982 to 1987 census, but also from the 1978 to 1982 census. From 1978 to 1987, average real value per farm declined from \$387,357 to \$226,566, a -5.8% compound annual rate of decline. Other significant declines in real value occurred between the 1910 and 1925 censuses and 1930 and 1935 censuses. Compound annual rate of decline was 1.4% in the former period and 6.4% in the latter period. Thus, even from

a historical perspective, the decline in farm values was substantial, and clearly a significant legacy of the 1980s farm crisis.

### Farm Sector Recovery

Since 1984, net U.S. farm sector cash income in current dollars has increased from \$39 billion to an estimated \$61 billion in 1990. Both crop and livestock farms are better off, but livestock farms have significantly outperformed crop farms. Net cash farm income for livestock farms increased from \$15.8 billion in 1984 to \$30 billion in 1990, an increase of 90%. In contrast, net cash farm income for crop farms increased from \$21 to \$31 billion, an increase of 48%. A significant proportion of the increase in income earned by crop farms has been garnered by fruit, nut and vegetable farms. In 1986, the earliest year for which consistent data are available, fruit, nut and vegetable farms earned \$7.1 billion. By 1990, their net cash farm income had increased to approximately \$12 billion. This increase accounted for 74% of the increase in net cash farm income earned by crop farms between 1986 and 1990.

The better performance of livestock farms reflects several factors. First, number of cattle on farms has declined from 132 million head on January 1, 1975 to just under 100 million head at present. Second, reflecting general economic growth, per-capita U.S. consumption increased from 209 pounds of red meat and poultry in 1984 to 221 pounds in 1990. Third, since 1984, exports of red meats and poultry increased from 961 million pounds to a forecast of 2,435 million pounds in 1990. Both beef and poultry exports more than doubled. Last, in response to the farm financial crisis, the Food Security Act of 1985 substantially lowered price support nonrecourse loan rates in an effort to

stimulate domestic and foreign utilization of field crops. As a consequence, market prices for feed grains and oilseeds declined. This reduction lowered the cost of producing livestock.

### Conclusions

From the farm sector perspective, there are only two major legacies of the farm crisis of the 1980s. One was the decline in value of land and buildings. The importance of this adjustment mechanism was in contrast to most of the post-World War II period, when the exodus of farmers and increased reliance on off-farm income were the primary farm sector adjustment mechanisms. If this change in the relative importance of the various sector adjustment mechanisms continues in the future, land values will become more variable than their performance history would suggest.

The second major legacy has been the concentration of the farm sector's recovery in the livestock sector. Thus, in contrast to the 1970s, the livestock sector, not the crop sector, has emerged as the profit growth center for farming. The relatively better performance of the livestock sector suggests sluggish increases in land prices relative to the sector's overall increase in farm income. In addition, exports of meat, especially poultry and beef, have emerged as a major vehicle for growth, and, assuming no major policy change, should become an increasingly important determinant of farm sector health.

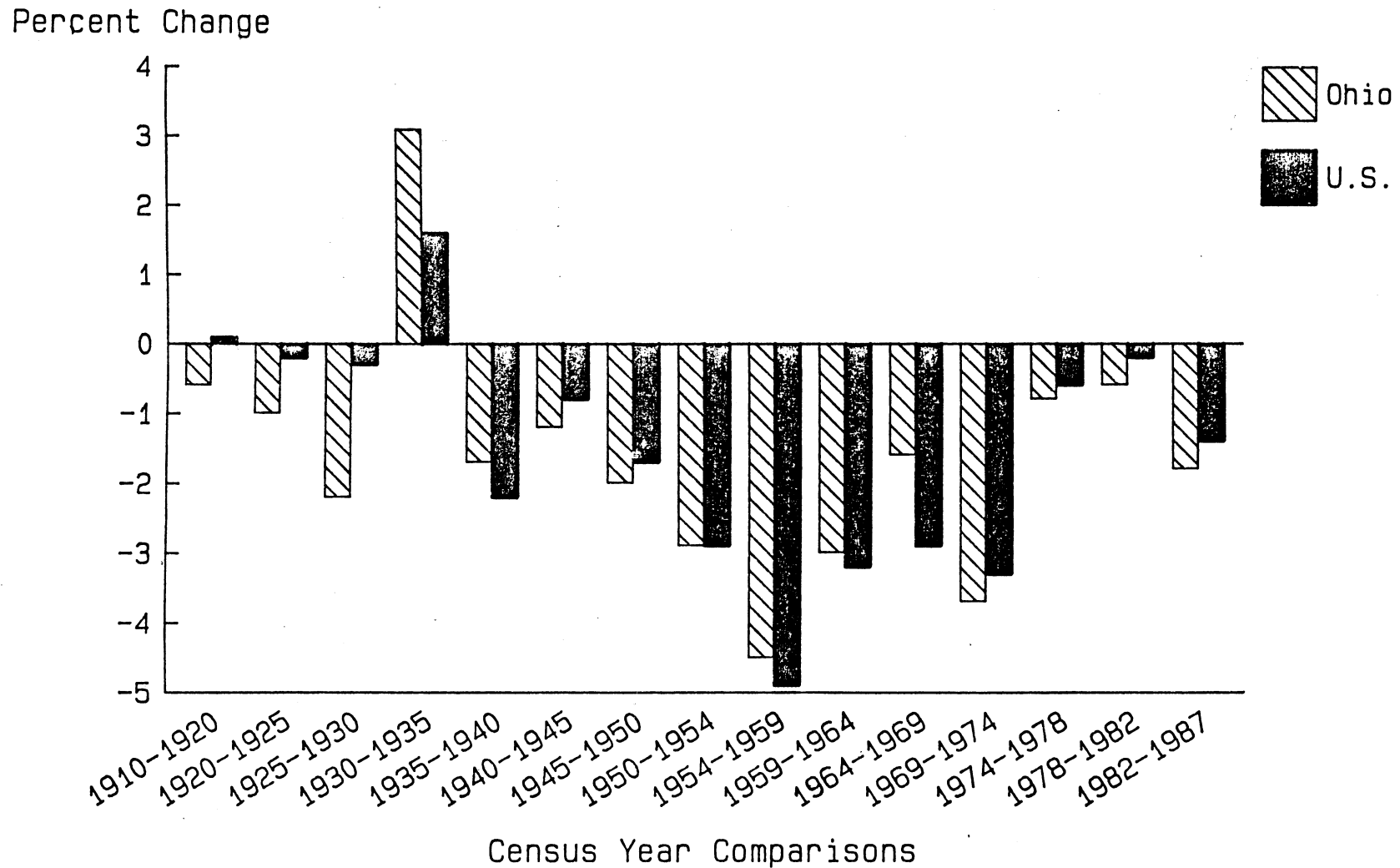
TABLE 1. SELECTED CHARACTERISTICS OF FARMS &amp; FARM OPERATORS, OHIO &amp; U.S., 1982 &amp; 1987

CHARACTERISTIC	OHIO		UNITED STATES	
	1982	1987	1982	1987
Number of Farms (1,000)	87	79	2,241	2,088
Acres of land in farms (1,000)	15,404	14,997	986,796	964,471
Acres of land in farms per farm	177	189	440	462
Cropland per farm with cropland	144	160	222	240
Farm sales per farm	\$38,966	\$43,317	\$58,858	\$65,165
Value of land and buildings per farm	\$267,899	\$227,341	\$345,869	\$289,387
Proportion of land rented/leased (%)	41	44	41	42
Average Farm Operator Age (years)	49.8	51.1	50.5	52.0
Distribution of Farms by Farm Sales	----- % -----			
Less than \$10,000	49.7	49.7	49.0	49.2
\$10,000 - 19,999	14.1	14.2	11.6	12.0
\$20,000 - 39,999	12.3	12.2	11.1	10.8
\$40,000 - 99,999	13.7	13.1	14.9	13.8
\$100,000 - 249,999	7.9	8.1	9.6	9.7
\$250,000 - 499,999	1.7	2.0	2.6	2.9
\$500,000 and more	0.5	0.7	1.2	1.5
Distribution of operators by residence:				
On-farm operated (%)	75.7	76.4	70.6	71.3
Not on-farm operated (%)	15.7	17.4	19.1	21.2
Not reported (%)	8.6	6.2	10.3	7.5
Distribution of operators by days worked off-farm:				
None (%)	34.7	35.9	38.4	40.4
1-99 (%)	9.2	8.5	10.0	9.6
100-199 (%)	8.5	8.2	8.4	8.5
200 or more (%)	40.7	41.3	34.6	35.3
Not reported (%)	6.9	6.0	8.6	6.1
Distribution operators by tenure:				
Full owner (%)	59.5	59.5	59.2	59.3
Part owner (%)	29.2	29.5	29.3	29.2
Tenant (%)	11.3	11.0	11.6	11.5
Distribution of operators by farm organization:				
Individual or family (%)	86.2	86.5	86.9	86.7
Partnership (%)	11.5	11.0	10.0	9.6
Family-held corporation (%)	1.6	2.0	2.4	3.0
Other corporation (%)	0.3	0.2	0.3	0.2
Others (%)	0.4	0.4	0.5	0.6

SOURCES: 1982 and 1987 Censuses of Agriculture

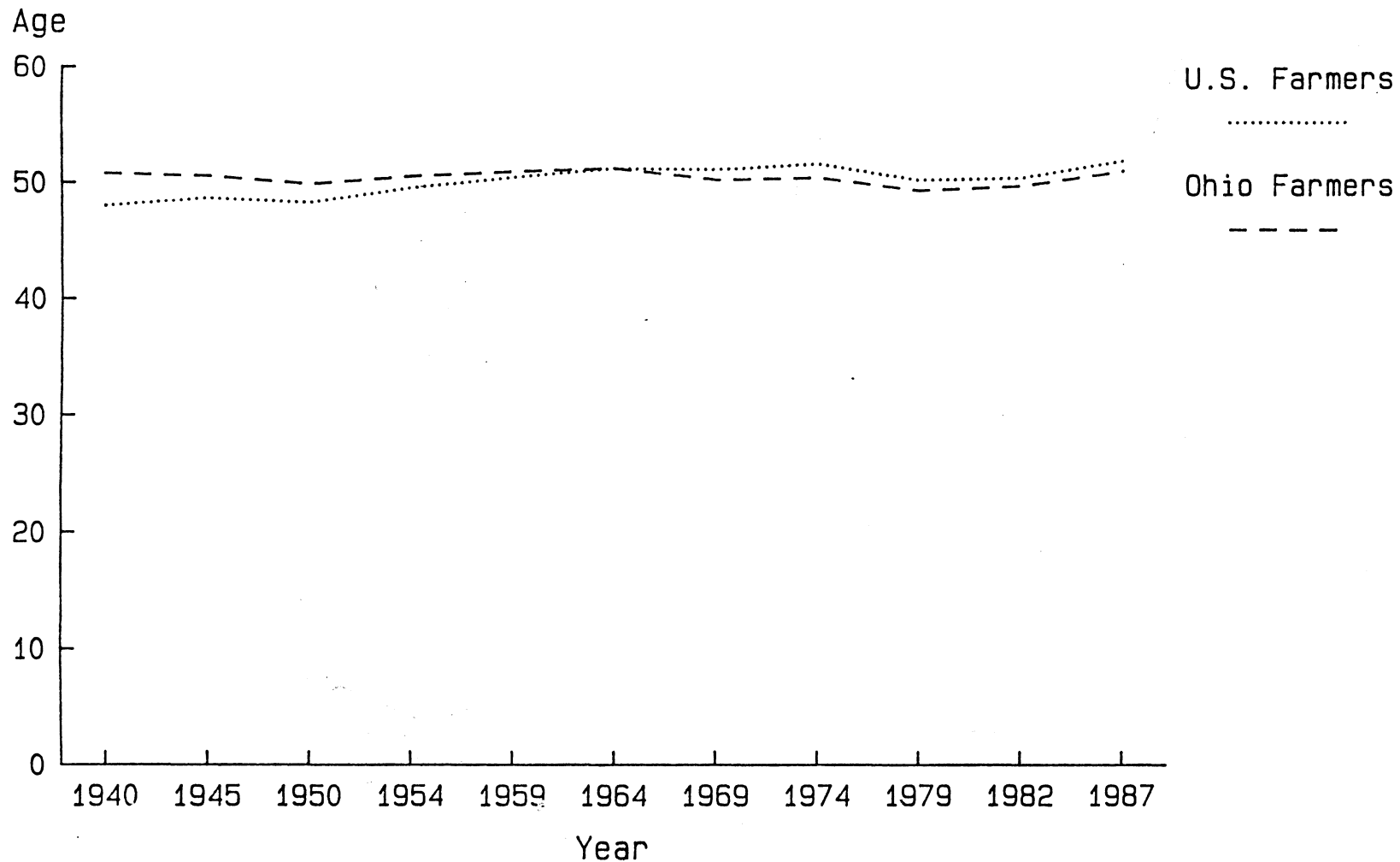


Figure 1. Compound Annual Rate of Change in Farm Numbers Between Agricultural Censuses, Ohio and U.S., 1910-1987.



SOURCES: U.S. Department of Commerce, Censuses of Agriculture, 1910-1987.

Figure 2. Average Age of Farm Operators,  
U.S. and Ohio, 1940-87



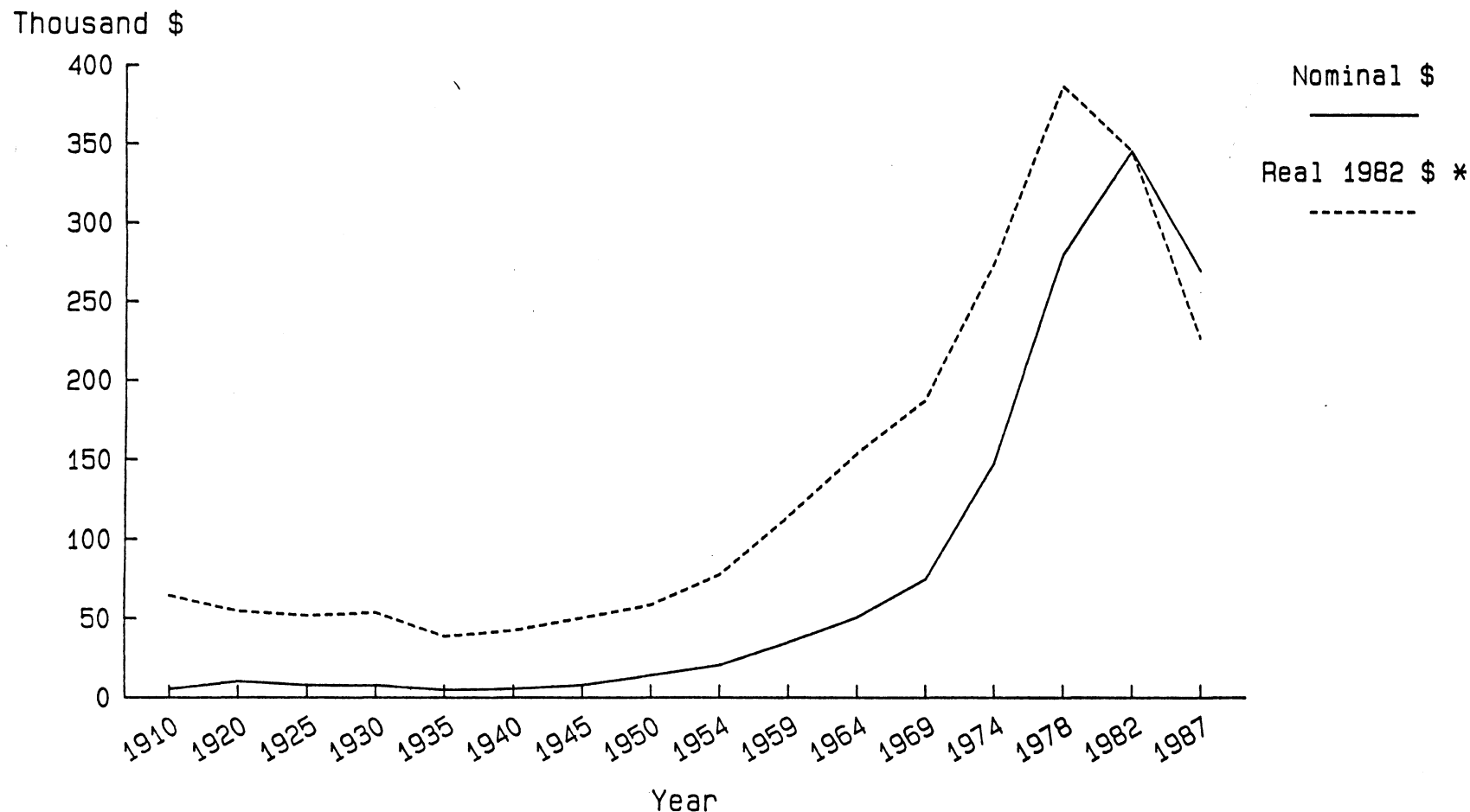
SOURCE: U.S. Census of Agriculture, Various  
Years, 1940-1987.

Figure 3. Operators Working Off-Farm,  
Ohio and U.S., 1940-87



SOURCE: U.S. Census of Agriculture, Various Years, 1940-1987.

Figure 4. Average Value of Farm Land and Buildings Per Farm, U.S., 1910-1987.



\* Implicit GNP deflator was used to determine real dollars.

SOURCES: U.S. Department of Commerce, Censuses of Agriculture, 1910-1987.